

**Notice of Allowability**

Application No.

10/534,771

Applicant(s)

WALBRACHT, JORG

Examiner

RuiMeng Hu

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed on 06/21/2007.
2. ☒ The allowed claim(s) is/are 21,23,24 and 31-35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. **Claims 21, 23-24 and 31-35** are allowed.
2. The following is an examiner's statement of reasons for allowance:

Consider **claim 21**, the best prior art of record found during the examination of the present application, **Nojima et al. (US Patent 4772856)** in view of **Dent (US Patent 6889034)** fail to specifically disclose wherein a signal generated by the power amplifier is divided into two part signals of equal size and fed to the plurality phase modifiers.

Consider **claim 21**, Nojima et al. disclose an apparatus for optimizing the efficiency of an amplifier arrangement comprising (Abstract, figures 4 and 5, column 4 line 45-column 5 line 8, column 5 line 66-column 6 line 2): a non-linear power amplifier (figure 5, amplifier 34) in a mobile radio device (column 1 lines 5-7, column 8 lines 58-60); and a plurality of push-pull phase modifiers coupled to said amplifier (figure 5, phase shifters 44 and 52 having phase inversion capability, push-pull phase shifting), wherein said phase modifiers generate a signal offset in phase (phase inverting) from an input signal and wherein the outputs of the phase modifiers are coupled to a passive component (figure 5, combiner 47).

However, Nojima et al. fail to disclose wherein a symmetrical transformer included in the amplifier arrangement is used as the passive component, and wherein

a voltage is decoupled in the symmetrical transformer that is rectified in a rectifier, and wherein the direct current output by the rectifier is fed to a supply unit as charge current.

In the same field of endeavor, Dent discloses wherein a symmetrical transformer included in the amplifier arrangement is used as the passive component, and wherein a voltage is decoupled in the symmetrical transformer that is rectified in a rectifier, and wherein the direct current output by the rectifier is fed to a supply unit as charge current (figure 2, column 4 lines 7-44, the coupler comprises a transformer as shown in figure 3).

Nojima et al. in view of Dent disclose (Nojima et al., figure 4) a divider 31 equally divides an input signal from the input terminal 11, and the divider 31 has its two output terminals connected to the inputs of first and second amplifying means 32 and 33, respectively. These teachings clearly differ from the claimed invention; therefore, claims 21, 23-24 and 31-35 of the present application are considered novel and non-obvious over the prior art and, consequently, are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed**

**to:** Commissioner for Patents  
P.O. Box 1450

Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

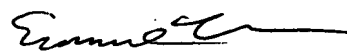
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RuiMeng Hu  
R.H./rh  
August 21, 2007

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600